

REMARKS

The Official Action objects to the grammar in the preamble of claim 61. The grammar is believed to be suitable for one of skill in the art to understand the claim, which is all that is required. Of course, suggestions for improvement to the grammar in the preamble of claim 61 are welcome.

Claims 61-72 were rejected as unpatentable over CARRIKER et al. 2003/0004619 in view of CRONKHITE et al. 5,308,022; and claim 66 was also rejected further in view of KRUMES et al. 5,465,142. Reconsideration and withdrawal of the rejections are respectfully requested.

The Official Action inserts the words "capable of" into the claims when interpreting the claims, although the Official Action does not explain why this addition was made. The claims define a structure that generates the defined symbols (the symbol generator), without the words "capable of" appearing in the claims. The insertion is not understood and an explanation is respectfully requested if the rejection is repeated.

CARRIKER et al. disclose in Figure 9A a track followed by aircraft as it intercepts a flight path. As acknowledged in the Official Action, there is no suggestion in this reference to actually display this track to the pilot, and the Official Action relies on CRONKHITE et al. for the suggestion to modify the display in CARRIKER et al. to include a display of this track.

The track in Figure 9A is the actual flight path of the aircraft and includes the flight path that is to be intercepted and a first symbol indicating a position of the airplane relative to the flight path. The track in Figure 9A (assuming that it is displayed, see the further comments below) still would not include a first indicator that is attached to the first symbol (the aircraft in Figure 9A) and that is a straight line with an angular orientation corresponding to a direction of the ground speed vector and with a length that varies and corresponds to a magnitude of the ground speed vector when the magnitude exceeds a predetermined value and that is constant and proportional to the predetermined value when the magnitude is less than or equal to the predetermined value. The Official Action indicates that the line segment between the aircraft locations A and B includes this first indicator. It is noted that Figure 9A does not include this line segment and thus this is not part of the prior art. Reference to this line segment is improper and should be removed.

Further, neither reference states that a line extending from the aircraft should have an angular orientation corresponding to a direction of the ground speed vector and a length that varies and corresponds to a magnitude of the ground speed vector when the magnitude exceeds a predetermined value and that is constant and proportional to the predetermined value when the magnitude is less than or equal to the predetermined value, and thus it is not apparent why this feature would be obvious to

one of skill in the art. Even if the line were to have the required angular direction, there is nothing in the combination to suggest to one of skill in the art that the length of the line should follow the two limitations set forth in claim 61.

Further still, there is no indication in either reference that a symbol generator should even be made capable of providing the first indicator. The art does not suggest the line with the claimed two limitations regarding line length and thus these two limitations would not be obvious to one of skill in the art.

The Official Action implies that Figure 9A in CARRIKER et al. would be displayed to the pilot, given the suggestion in CRONKHITE et al. However, Figure 9A shows three different historical positions of the aircraft and the historical tracks between the respective positions. There is no indication in the combination that the entire track from position B to position D would be displayed with the claimed first indicator attached to the first symbol, the second indicator attached to the first indicator, and the third indicator extending tangentially from the second indicator.

In addition, claim 61 has been amended to provide that the second and third indicators relate to a "future approach path". There is no indication in the reference to display a future flight path. In the proposed combination, position D would not be displayed until the aircraft actually reached this

position, and upon reaching position D displaying the historical tracks between positions B and C and C and D would serve no purpose (indeed, it probably would be distracting, thereby decreasing pilot awareness). Why would the pilot care about the track from position B to position C and from position C to position D once he has reached position D? The historical tracks would be removed from the display as the aircraft moves along the track. When the historical tracks are removed, the proposed combination would not include all three indicators claimed in claim 61. By contrast, the claimed three indicators are displayed in combination (they are attached to each other), and there is no suggestion in the combination to do this. One of skill in the art would not display all three indicators as claimed based on the proposed combination.

Accordingly, the claims avoid the rejections under §103.

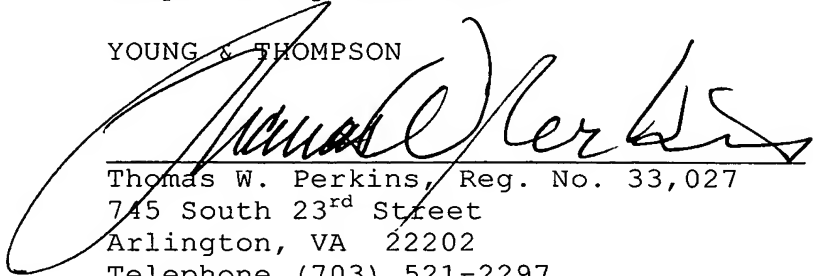
The dependent claims have been amended in response to the comment at the bottom of page 4 of the Official Action. Consideration and allowance of these claims are respectfully requested.

In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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A large, stylized handwritten signature in black ink, appearing to read 'Thomas W. Perkins', is written over the printed name and address.

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